WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - POST BUMP ALIVENESS CHECK
MEASUREMENT DATE: 14 Jul 2000 TIME: 14:04:16

TESTED BY: JK C. Hd **APPROVED BY:** Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	0	0	1	0	1	1	1	1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 | 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1

*** BCH CODE OK ***

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ANNEX VI. SALT FOG TEST

POST SALT FOG ALIVENESS TEST

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - POST SALT FOG ALIVENESS CHECK
MEASUREMENT DATE: 19 Jul 2000 TIME: 12:35:24

TESTED BY: _____ **APPROVED BY:** Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 ±.001	406.028108	MHz	passed
Short term frequency stability	< 2.0E-9	4.87E-10		passed
Medium term: mean slope	< 1.0E-9	-7.83E-11	/min	passed
residual deviation	< 3.0E-9	9.82E-10		passed

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - POST SALT FOG ALIVENESS CHECK
MEASUREMENT DATE: 19 Jul 2000 TIME: 12:17:27

TESTED BY: [signature] **APPROVED BY:** Rosa Barineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Tx ouput power level	3.15 TO 7.93	4.54	W	passed
Tx ouput power level	3.15 TO 7.93	4.51	W	passed
Tx ouput power level	3.15 TO 7.93	4.51	W	passed

36.5 dBm

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - POST SALT FOG ALIVENESS CHECK
MEASUREMENT DATE: 19 Jul 2000 TIME: 12:36:50

TESTED BY: JLC JH APPROVED BY: Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	0	0	1	0	1	1	1	1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1

*** BCH CODE OK ***

Intentionally Blank

ANNEX VII. DROP TEST

POST DROP ALIVENESS TEST (ON HARD SURFACE)

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: ~~023~~ 029
BEACON CERTIFICATION TEST RESULTS - Post - Drop Aliveness Check
MEASUREMENT DATE: 11 Sep 2000 TIME: 11:43:53

TESTED BY: _____ APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Nominal transmitted frequency	406.028 ±.001	406.028085	MHz	pa
Short term frequency stability	< 2.0E-9	4.28E-10		pa
Medium term: mean slope	< 1.0E-9	-7.94E-10	/min	pa
residual deviation	< 3.0E-9	4.04E-10		pa

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: ~~023~~ 029 CH
BEACON CERTIFICATION TEST RESULTS - POST-DROP ALIVENESS CHECK
MEASUREMENT DATE: 11 Sep 2000 TIME: 11:25:17

TESTED BY: _____ **APPROVED BY:** Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Tx ouput power level	3.15 TO 7.93	4.74	W	pas
Tx ouput power level	3.15 TO 7.93	4.74	W	pas
Tx ouput power level	3.15 TO 7.93	4.74	W	pas

36.8 dBm

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 023 9 3rd
BEACON CERTIFICATION TEST RESULTS - Post Drop Aliveness Check
MEASUREMENT DATE: 11 Sep 2000 TIME: 11:44:16

TESTED BY: _____ **APPROVED BY:** Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	0	0	1	0	1	1	1	1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	0
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	

*** BCH CODE OK ***

POST DROP ALIVENESS TEST (IN WATER)

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - POST WATER DROP ALIVENESS CHECK
MEASUREMENT DATE: 11 Sep 2000 TIME: 13:22:14

TESTED BY: J. C. H **APPROVED BY:** Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 ±.001	406.028059	MHz	passed
Short term frequency stability	< 2.0E-9	4.03E-10		passed
Medium term: mean slope	< 1.0E-9	+1.95E-09	/min	failed
residual deviation	< 3.0E-9	8.22E-09		failed

NA

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - POST WATER DROP ALIVENESS CHECK
MEASUREMENT DATE: 11 Sep 2000 TIME: 12:21:51

TESTED BY: _____ APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Tx ouput power level	3.15 TO 7.93	4.57	W	passed
Tx ouput power level	3.15 TO 7.93	4.57	W	passed

36.6 dBm

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - POST WATER DROP ALIVENESS CHECK
MEASUREMENT DATE: 11 Sep 2000 TIME: 13:05:30

TESTED BY: _____ **APPROVED BY:** Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	0	0	1	0	1	1	1	1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1

*** BCH CODE OK ***

ANNEX VIII. LEAKAGE AND IMMERSION

POST IMMERSION ALIVENESS TEST (FRESH WATER)

UUT AT 70°C -- WATER AT 27° C

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA Aliveness Test.
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Post Temp Shock (Immersion) 70°
BEACON CERTIFICATION TEST RESULTS - Water Temp 27°C Clear Water (Fresh)
MEASUREMENT DATE: 10 Oct 2000 TIME: 11:44:48

TESTED BY: C. Bah APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 ±.001	406.027985	MHz	passed
Short term frequency stability	< 2.0E-9	3.59E-10		passed
Medium term: mean slope	< 1.0E-9	+3.44E-10	/min	passed
residual deviation	< 3.0E-9	2.28E-10		passed

Aliveness test

MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - Post Temp Shock (immersion) 70°C water temp
MEASUREMENT DATE: 10 Oct 2000 TIME: 11:52:11 17°C Fresh water.

TESTED BY: CBoh APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Tx ouput power level	3.15 TO 7.93	4.80	W	pas
Tx ouput power level	3.15 TO 7.93	4.80	W	pas
Tx ouput power level	3.15 TO 7.93	4.80	W	pas
Tx ouput power level	3.15 TO 7.93	4.80	W	pas

Aliveness Test

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - Post Shock Test (70°C)
MEASUREMENT DATE: 10 Oct 2000 TIME: 11:56:40 Water Temp 27°C Fresh Water

TESTED BY: C Bath **APPROVED BY:** Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	0	0	1	0	1	1	1	1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	0
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	

*** BCH CODE OK ***

POST IMMERSION ALIVENESS TEST (SALT WATER)

UUT AT 70° C -- WATER AT 25.6° C

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Aliveness Test Temp Shock 70°C
BEACON CERTIFICATION TEST RESULTS - Water Temp 25.6 C Saltwater
MEASUREMENT DATE: 10 Oct 2000 TIME: 16:19:22

TESTED BY: C Bah **APPROVED BY:** Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Nominal transmitted frequency	406.028 ±.001	406.027986	MHz	pas
Short term frequency stability	< 2.0E-9	3.76E-10		pas
Medium term: mean slope	< 1.0E-9	+3.17E-10	/min	pas
residual deviation	< 3.0E-9	1.93E-10		pas

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Aliveness Test Temp Shock 70
BEACON CERTIFICATION TEST RESULTS - Water Temp 25.6°C SALT water.
MEASUREMENT DATE: 10 Oct 2000 TIME: 15:56:56

TESTED BY: C. Bel APPROVED BY: Rosa Barineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Tx ouput power level	3.15 TO 7.93	3.74	W	passed
Tx ouput power level	3.15 TO 7.93	3.81	W	passed
Tx ouput power level	3.15 TO 7.93	3.89	W	passed

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Aliveness TEST Temp Shock
BEACON CERTIFICATION TEST RESULTS - water temp 85.6 SALT water.
MEASUREMENT DATE: 10 Oct 2000 TIME: 16:02:10

TESTED BY: C Bak **APPROVED BY:** Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	0	0	1	0	1	1	1	1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1

*** BCH CODE OK ***

POST IMMERSION ALIVENESS TEST (FRESH WATER)

UUT AT -50° C -- WATER AT 2.3° C

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Low Temp Shock -50 °C
BEACON CERTIFICATION TEST RESULTS - Water Temp 2.3°C ALIVENESS TEST Fresh Water
MEASUREMENT DATE: 11 Oct 2000 TIME: 11:30:17

TESTED BY: C Burk APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 ±.001	406.027995	MHz	passed
Short term frequency stability	< 2.0E-9	7.09E-10		passed
Medium term: mean slope	< 1.0E-9	-5.45E-10	/min	passed
residual deviation	< 3.0E-9	6.34E-10		passed

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Low Temp Shock -50
BEACON CERTIFICATION TEST RESULTS - water Temp 2.3°C (Fresh water) All verses ET,
MEASUREMENT DATE: 11 Oct 2000 TIME: 11:31:26

TESTED BY: _____ APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Tx ouput power level	3.15 TO 7.93	4.96	W	pas
Tx ouput power level	3.15 TO 7.93	4.96	W	pas
Tx ouput power level	3.15 TO 7.93	4.96	W	pas
Tx ouput power level	3.15 TO 7.93	4.96	W	pas

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Low Temps Shock -50°C
BEACON CERTIFICATION TEST RESULTS - water temp 2.3°C Fresh water Aliveness Test
MEASUREMENT DATE: 11 Oct 2000 TIME: 11:37:46

TESTED BY: C Bch **APPROVED BY:** Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	0	0	1	0	1	1	1	1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1

*** BCH CODE OK ***

POST IMMERSION ALIVENESS TEST (SALT WATER)

UUT AT -50° C -- WATER AT -1.5° C

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Low Temp Shock. -50°
BEACON CERTIFICATION TEST RESULTS - Salt water temp - 1.5°C Aliveness test
MEASUREMENT DATE: 11 Oct 2000 TIME: 16:09:24

TESTED BY: C Bah **APPROVED BY:** Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Nominal transmitted frequency	406.028 ±.001	406.027993	MHz	pas
Short term frequency stability	< 2.0E-9	6.90E-10		pas
Medium term: mean slope	< 1.0E-9	-5.26E-10	/min	pas
residual deviation	< 3.0E-9	3.84E-10		pas

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Temp Shock -50°C
BEACON CERTIFICATION TEST RESULTS - water Temp -1.5°C (SALT WATER) - ALIVENESS TEST
MEASUREMENT DATE: 11 Oct 2000 TIME: 16:11:10

TESTED BY: C Bah APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMM
Tx ouput power level	3.15 TO 7.93	4.94	W	pas
Tx ouput power level	3.15 TO 7.93	4.95	W	pas
Tx ouput power level	3.15 TO 7.93	4.95	W	pas

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029 Low Temp Shock - 50°C
BEACON CERTIFICATION TEST RESULTS Saltwater Temp -1.5°C ALIVENESS TEST
MEASUREMENT DATE: 11 Oct 2000 TIME: 16:09:55

TESTED BY: C Bah **APPROVED BY:** Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	0	0	1	0	1	1	1	1

*** FRAME SYNCHONIZATION OK ***

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	0
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	

*** BCH CODE OK ***

ANNEX IX. SPURIOUS EMISSIONS

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - FULL PARAMETER AMBIENT
MEASUREMENT DATE: 2 Oct 2000 TIME: 16:01:51

TESTED BY: _____ APPROVED BY: Rosa Barrineau

SPECIFICATIONS TESTED	LIMITS	RESULTS	UNITS	COMMENTS
Nominal transmitted frequency	406.028 ±.001	406.028022	MHz	passed
Short term frequency stability	< 2.0E-9	4.32E-10		passed
Medium term: mean slope	< 1.0E-9	-3.00E-11	/min	passed
residual deviation	< 3.0E-9	6.03E-10		passed
Tx ouput power level	3.15 TO 7.93	4.57	W	passed
Burst envelope: rise time	< 5	.52	ms	passed
fall time	< 5	< 0.01	ms	passed
Phase modulation: + AVG	+1.1 ±0.1	1.04	rad	passed
- AVG	-1.1 ±0.1	-1.05	rad	passed
Modulation: symmetry	< 0.05	0.0000		passed
Modulation: rise time	150 ±100	134.2	us	passed
fall time	150 ±100	129.8	us	passed
Repetition period minimum	47.5 TO 52.5	48.3	s	passed
Repetition period maximum	47.5 TO 52.5	52.2	s	passed
Repetition period (max - min)	>1	3.9	s	passed
Total transmission time minimum	435.6 TO 444.4	439.4	ms	passed
Total transmission time maximum	435.6 TO 444.4	439.4	ms	passed
Cw preamble minimum	158.4 TO 161.6	159.1	ms	passed
Cw preamble maximum	158.4 TO 161.6	159.3	ms	passed
Message bit rate minimum	396.0 TO 404.0	399.9	bps	passed
Message bit rate maximum	396.0 TO 404.0	400.1	bps	passed

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS
MEASUREMENT DATE: 2 Oct 2000 TIME: 16:18:00

TESTED BY: _____ APPROVED BY: Rosa Barrineau

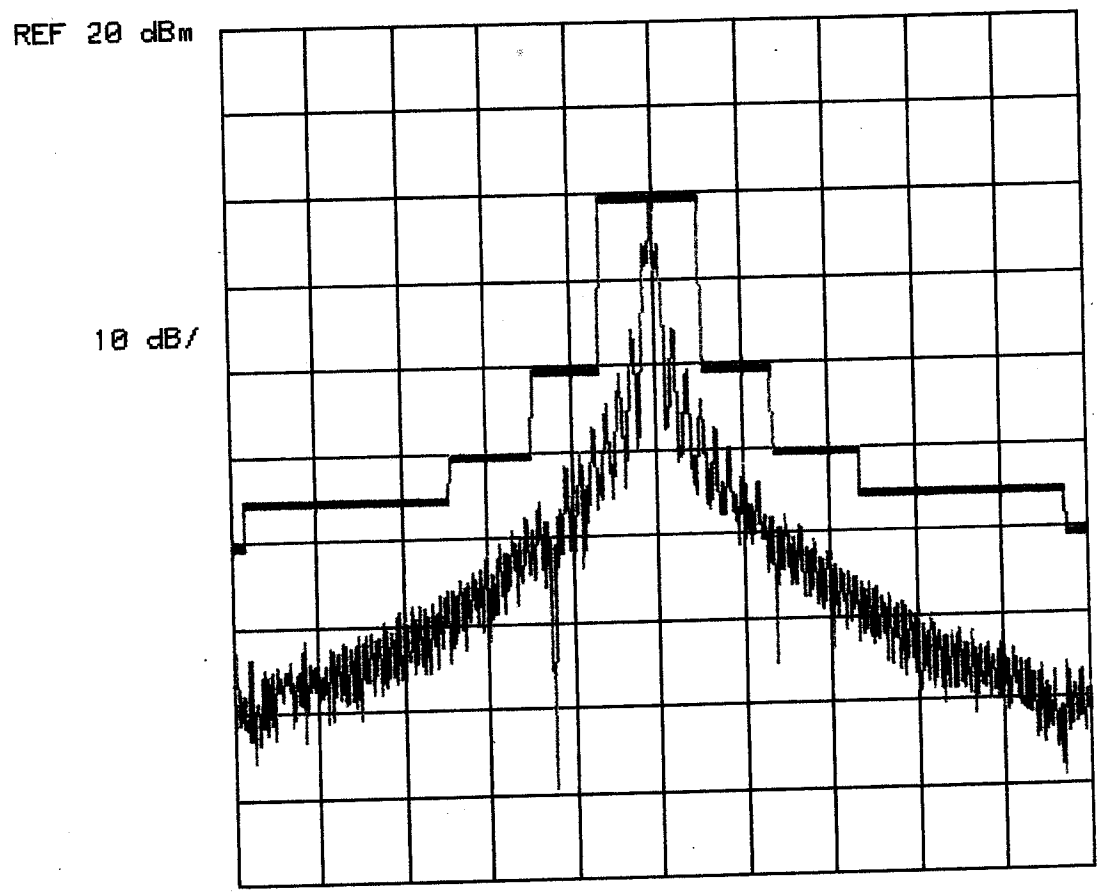
SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)

*** SPURIOUS TEST OK ***

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS
MEASUREMENT DATE: 2 Oct 2000 TIME: 19:13:23

TESTED BY: CBL APPROVED BY: Rosa Barrineau



SPURIOUS EMISSIONS SPECTRUM

MINIMUM TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS AT MINIMUM TEMP
MEASUREMENT DATE: 4 Oct 2000 TIME: 09:29:08

TESTED BY: C Bolan APPROVED BY: Rosa Barrineau

SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)

*** SPURIOUS TEST OK ***

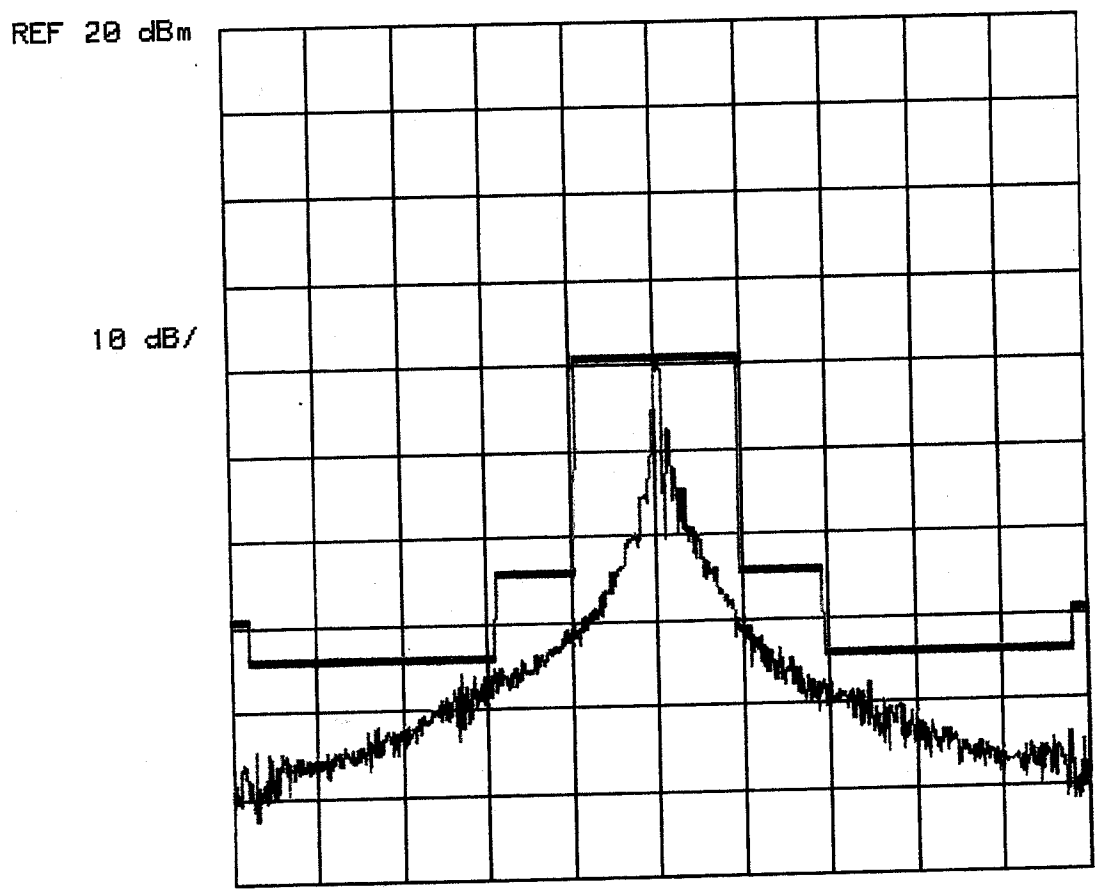
SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)

*** SPURIOUS TEST OK ***

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS -
MEASUREMENT DATE: 2 Oct 2000 TIME: 20:24:47

TESTED BY: C Bah **APPROVED BY:** Rosa Barrineau



SPURIOUS EMISSIONS SPECTRUM

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS AT MINIMUM TEMP
MEASUREMENT DATE: 4 Oct 2000 TIME: 13:21:26

TESTED BY: C. Baker APPROVED BY: Rosa Barrineau

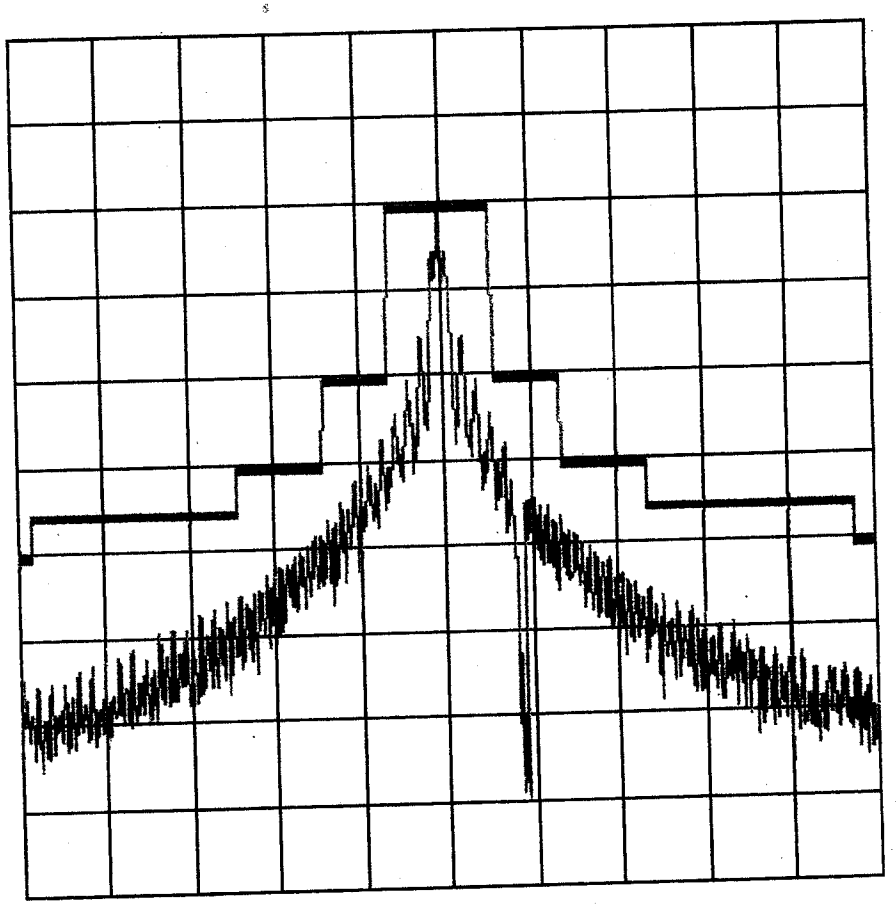
REF 20 dBm

4 Oct 2000

10 dB/

CENTER: 406.028MHz

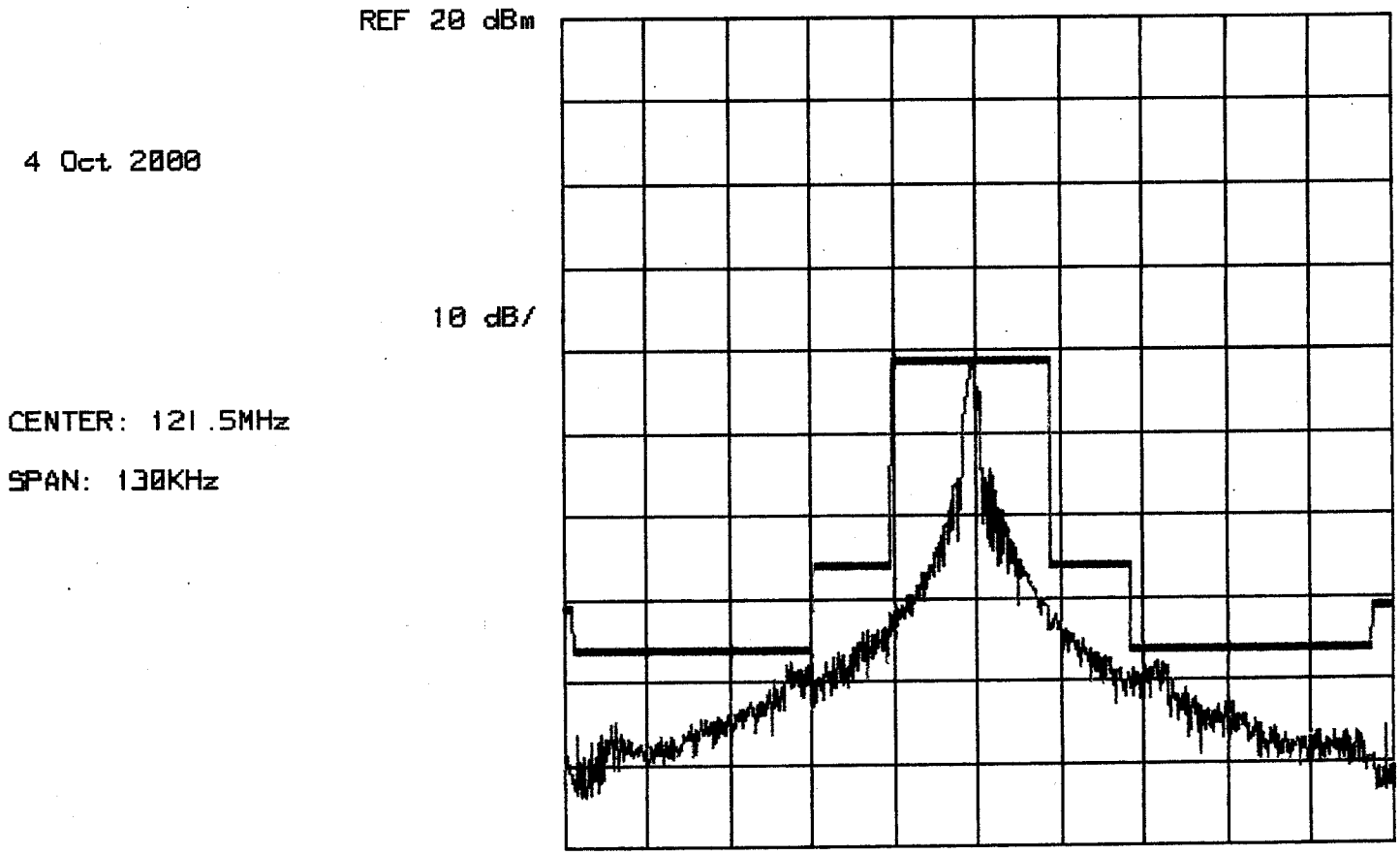
SPAN: 50KHz



SPURIOUS EMISSIONS SPECTRUM

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION
MEASUREMENT DATE: 4 Oct 2000 TIME: 14:54:22 121.5 Spurious

TESTED BY: C Bla APPROVED BY: Rosa Barrineau



SPURIOUS EMISSIONS SPECTRUM

MAXIMUM TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS AT MAXIMUM TEMP
MEASUREMENT DATE: 3 Oct 2000 TIME: 11:01:24

TESTED BY: C Bahn APPROVED BY: Rosa Barrineau

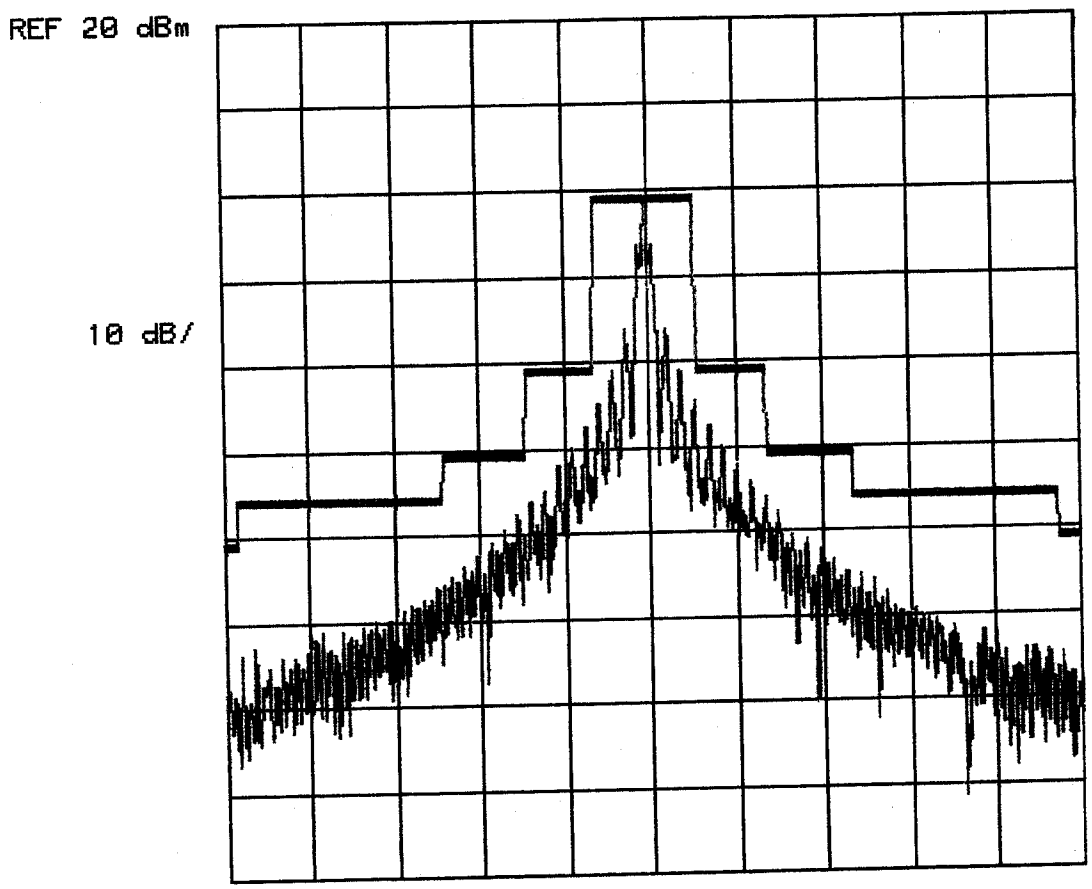
SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)

*** SPURIOUS TEST OK ***

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - 406 SIGNAL SPURIOUS EMISSIONS AT MAXIMUM TEMP
MEASUREMENT DATE: 3 Oct 2000 TIME: 13:34:10

TESTED BY: C. Bahn APPROVED BY: Rosa Barrineau



SPURIOUS EMISSIONS SPECTRUM

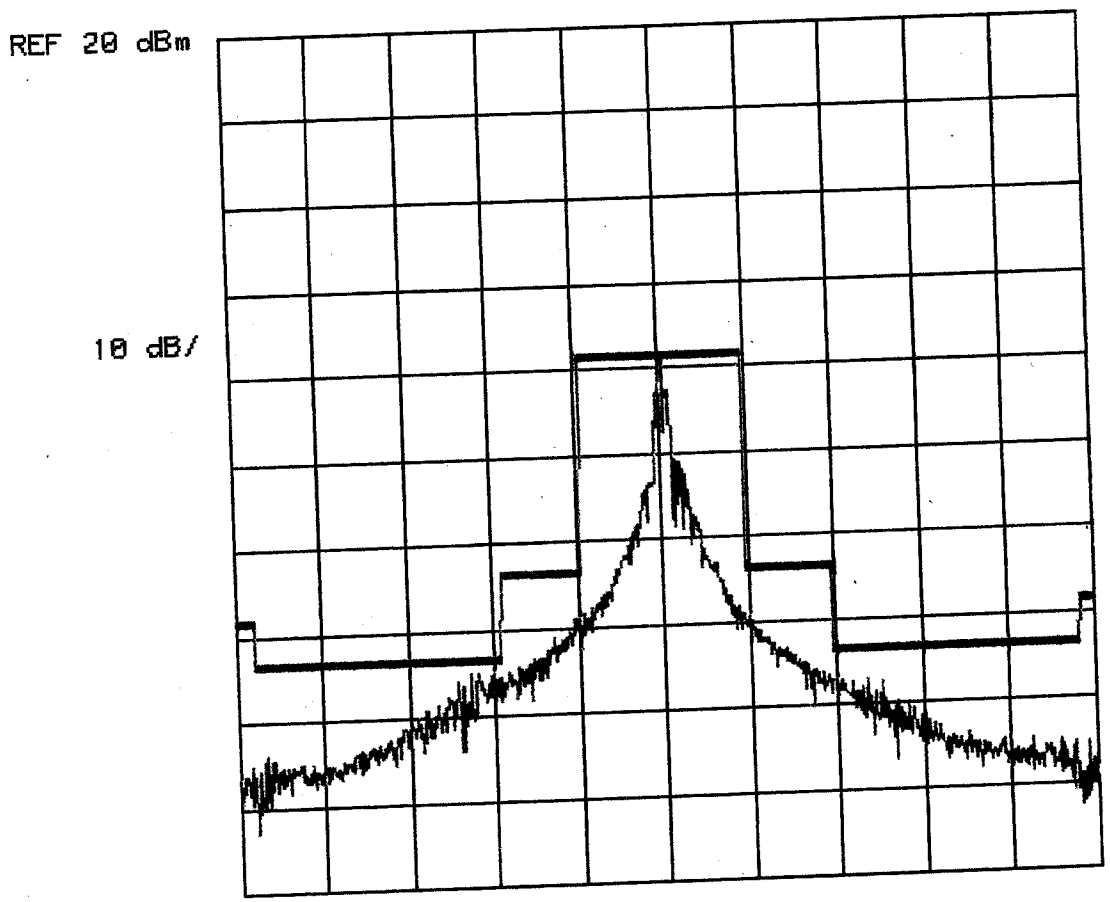
SPURIOUS EMISSIONS

FREQUENCY (MHz)	RESULTS (dBc)	LIMITS (dBc)

*** SPURIOUS TEST OK ***

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS -
MEASUREMENT DATE: 3 Oct 2000 TIME: 14:52:46

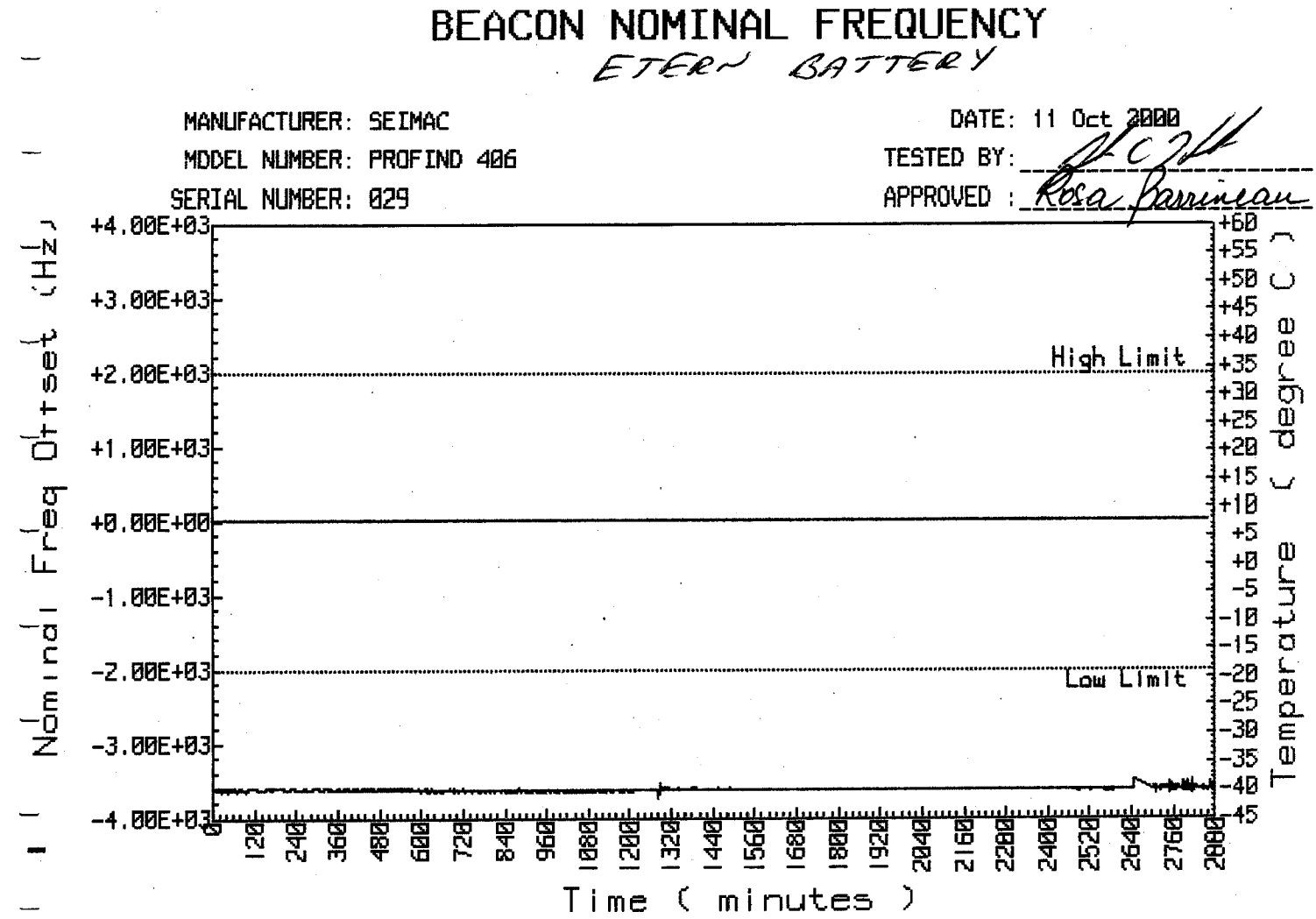
TESTED BY: CBL **APPROVED BY:** Rosa Barrineau



SPURIOUS EMISSIONS SPECTRUM

ANNEX X. OPERATIONAL LIFE AND STROBE LIGHT

ETERN BATTERY



BEACON SHORT TERM STABILITY

ETERN BATTERY

MANUFACTURER: SEIMAC

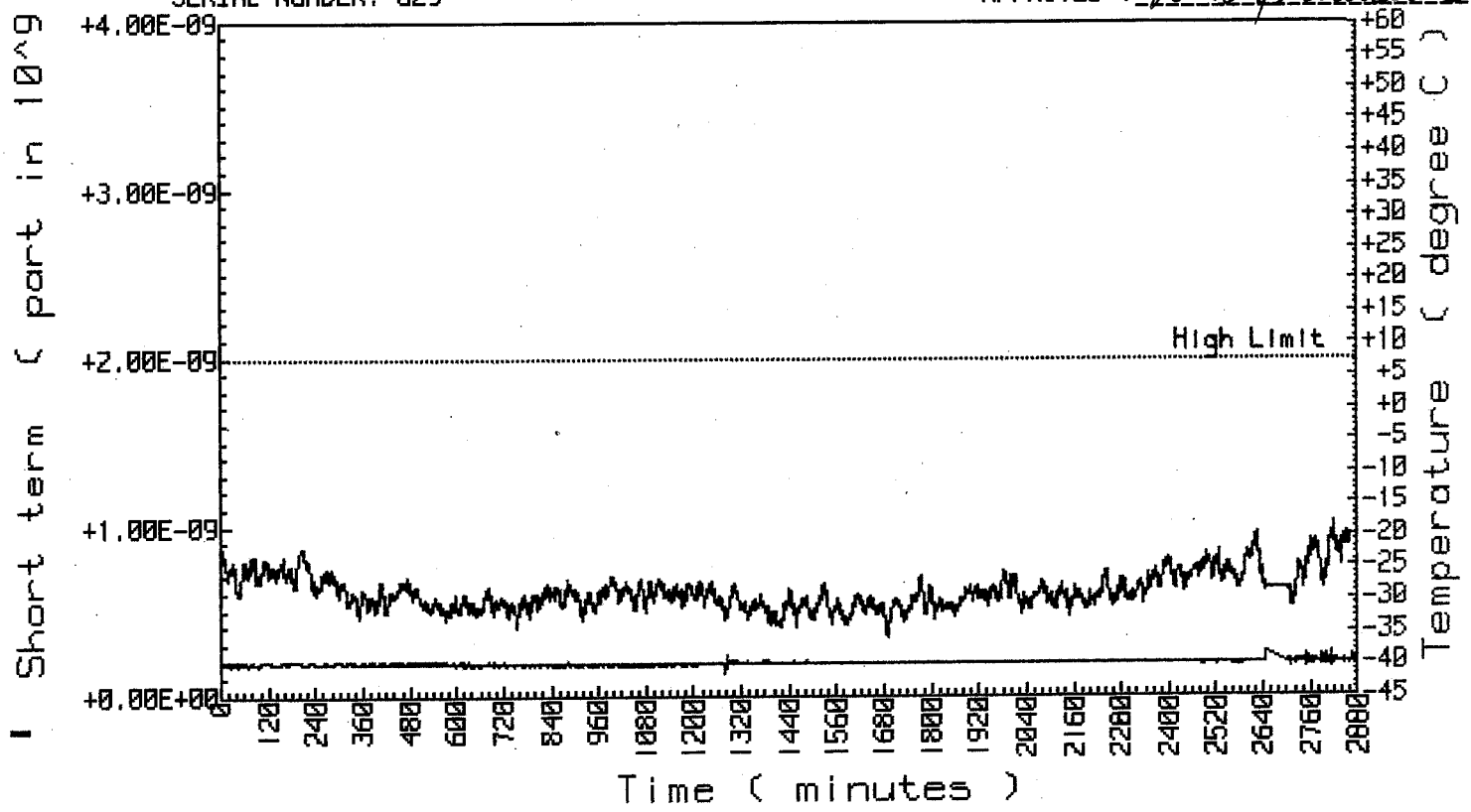
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: 029

DATE: 11 Oct 2000

TESTED BY: _____

APPROVED : Rosa Barrueco

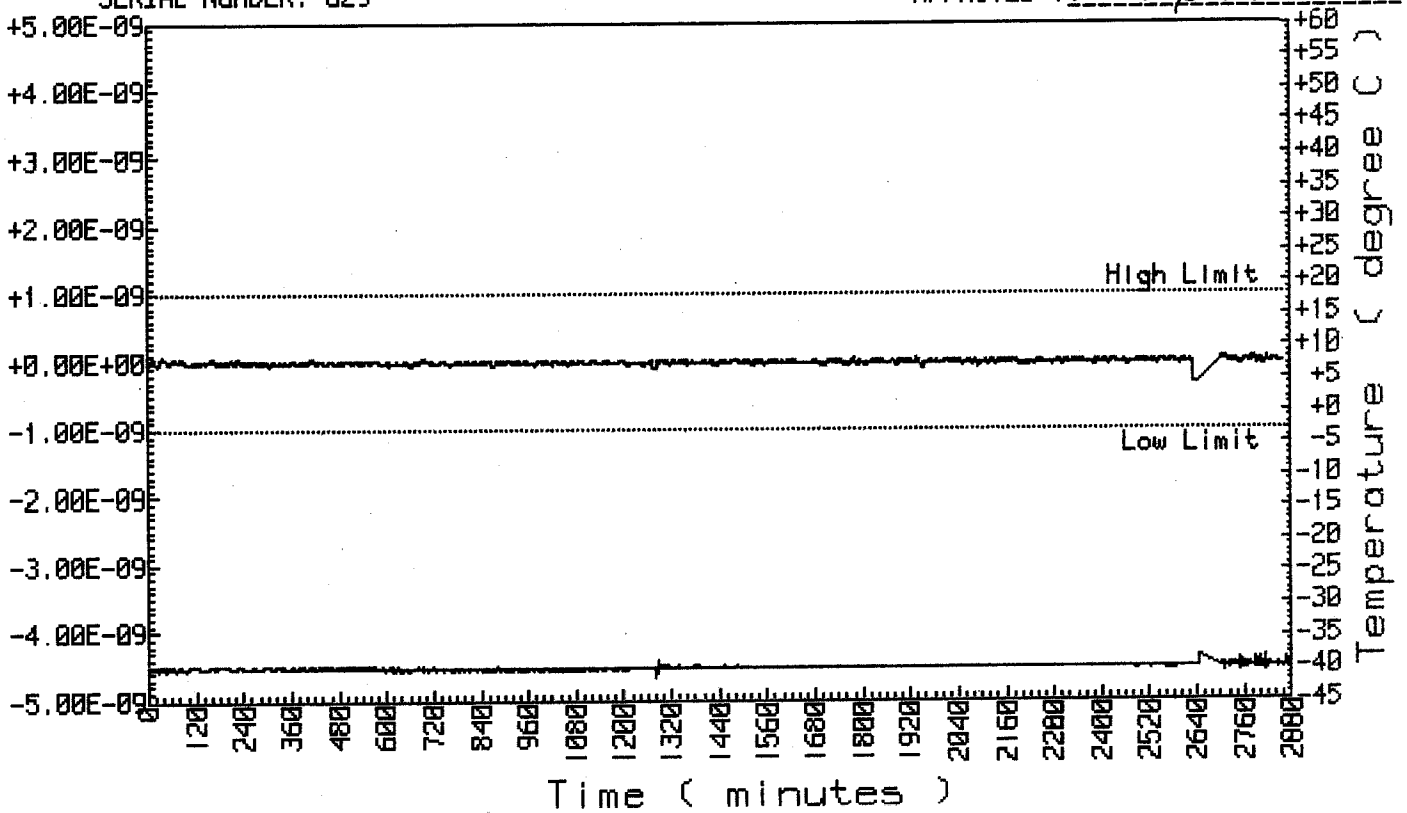


BEACON MEDIUM TERM STABILITY

ETERN BATTERY

MANUFACTURER: SEIMAC
MODEL NUMBER: PROFIND 406
SERIAL NUMBER: 029

DATE: 11 Oct 2000
TESTED BY: [signature]
APPROVED : Rosa Barrineau



BEACON MEDIUM TERM STABILITY

ETERN BATTERY

MANUFACTURER: SEIMAC

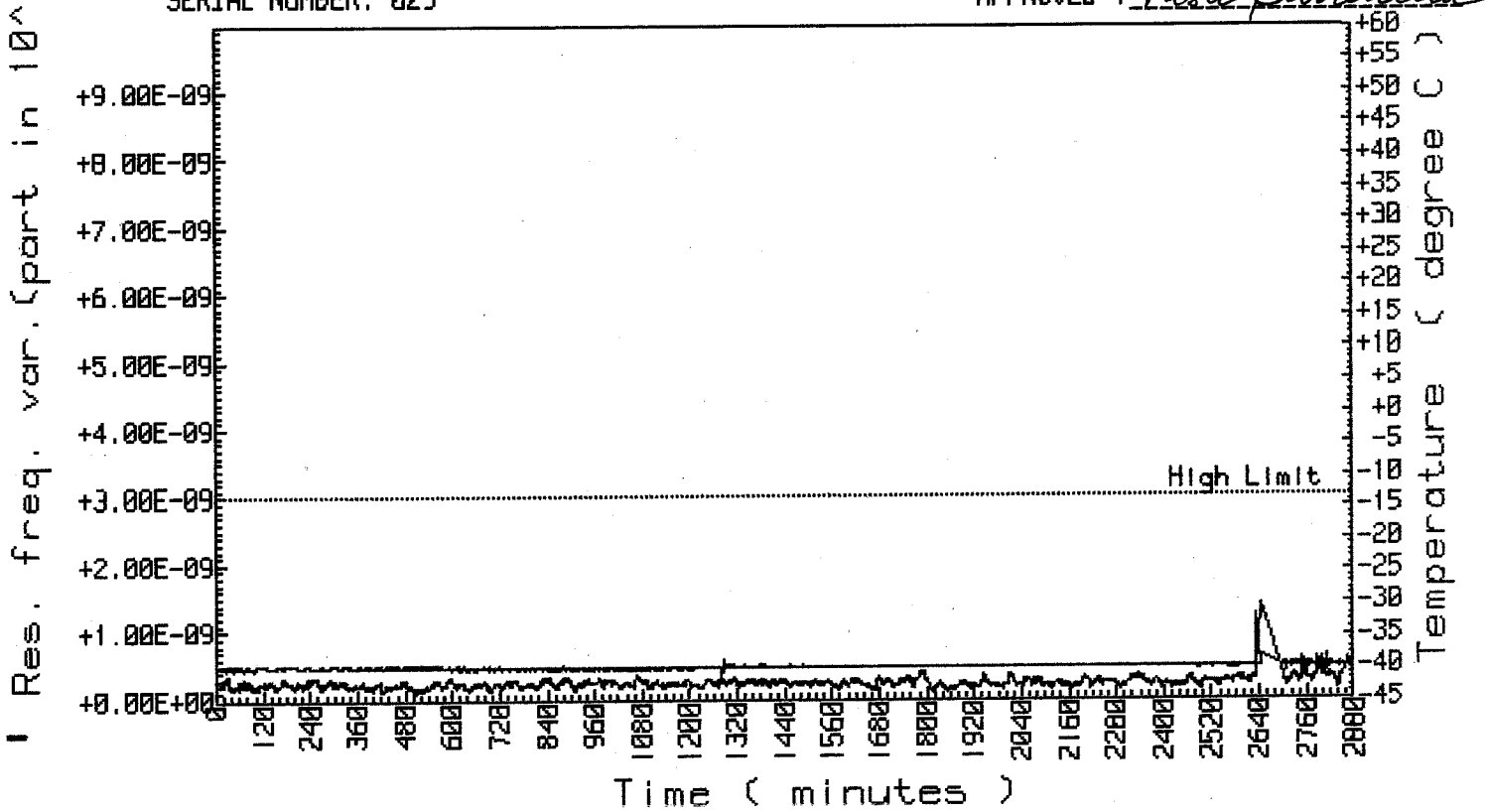
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: 029

DATE: 11 Oct 2000

TESTED BY: [signature]

APPROVED : Rosa Barrineau



406 SIGNAL OUTPUT POWER

ETERN BATTERY

MANUFACTURER: SEIMAC

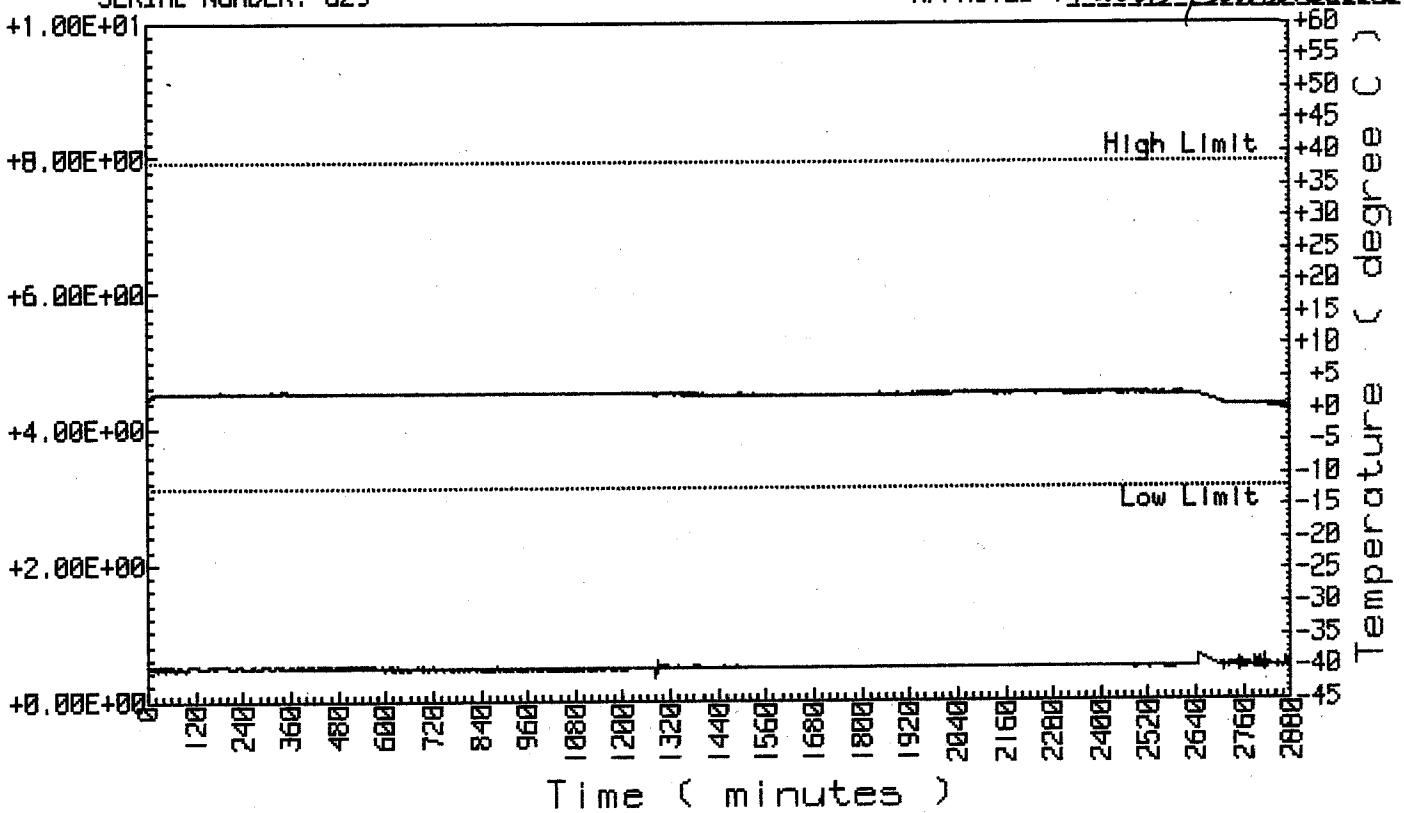
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: 029

DATE: 11 Oct, 2000

TESTED BY: [signature]

APPROVED : Rosa Bannineau



SAFT BATTERY

BEACON NOMINAL FREQUENCY

SAFT BATTERY

MANUFACTURER: SEIMAC

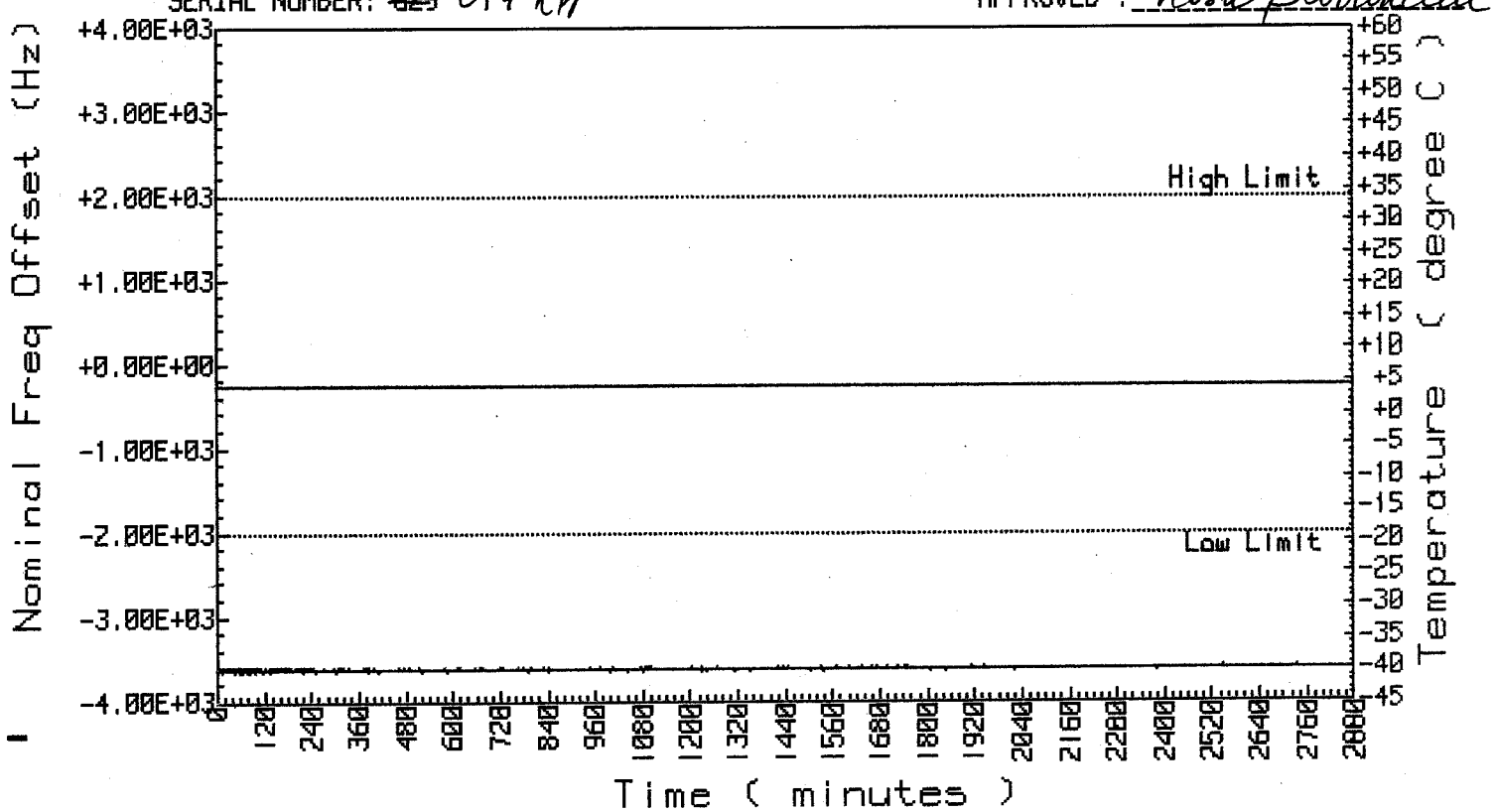
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: ~~829~~ 017 RH

DATE: 14 Oct 2000

TESTED BY: _____

APPROVED : Rosa Barrineau



BEACON SHORT TERM STABILITY

SAFT BATTERY

MANUFACTURER: SEIMAC

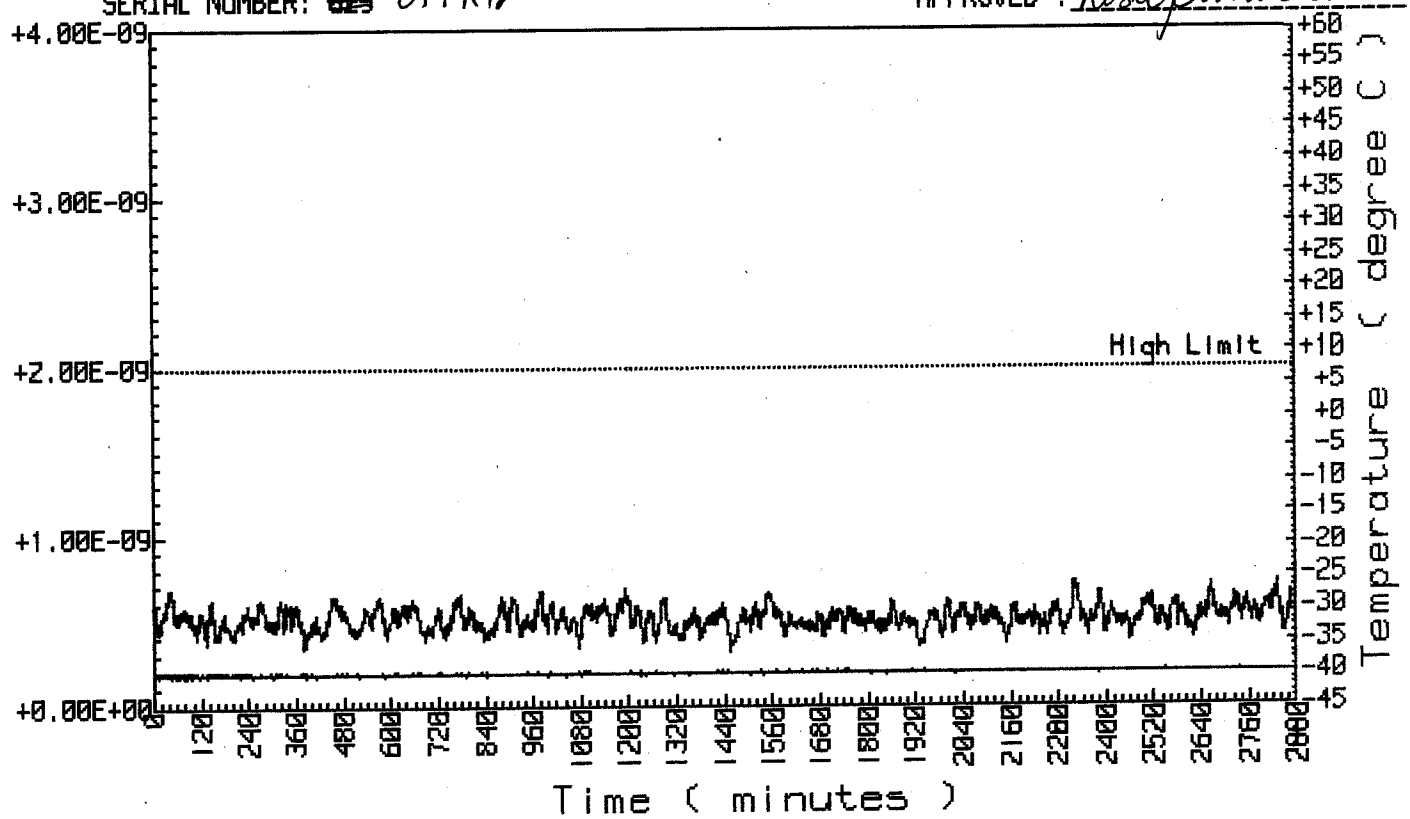
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: 017RB

DATE: 14 Oct 2000

TESTED BY: _____

APPROVED : Rosa Barrineau



BEACON MEDIUM TERM STABILITY

SAFT BATTERY

MANUFACTURER: SEIMAC

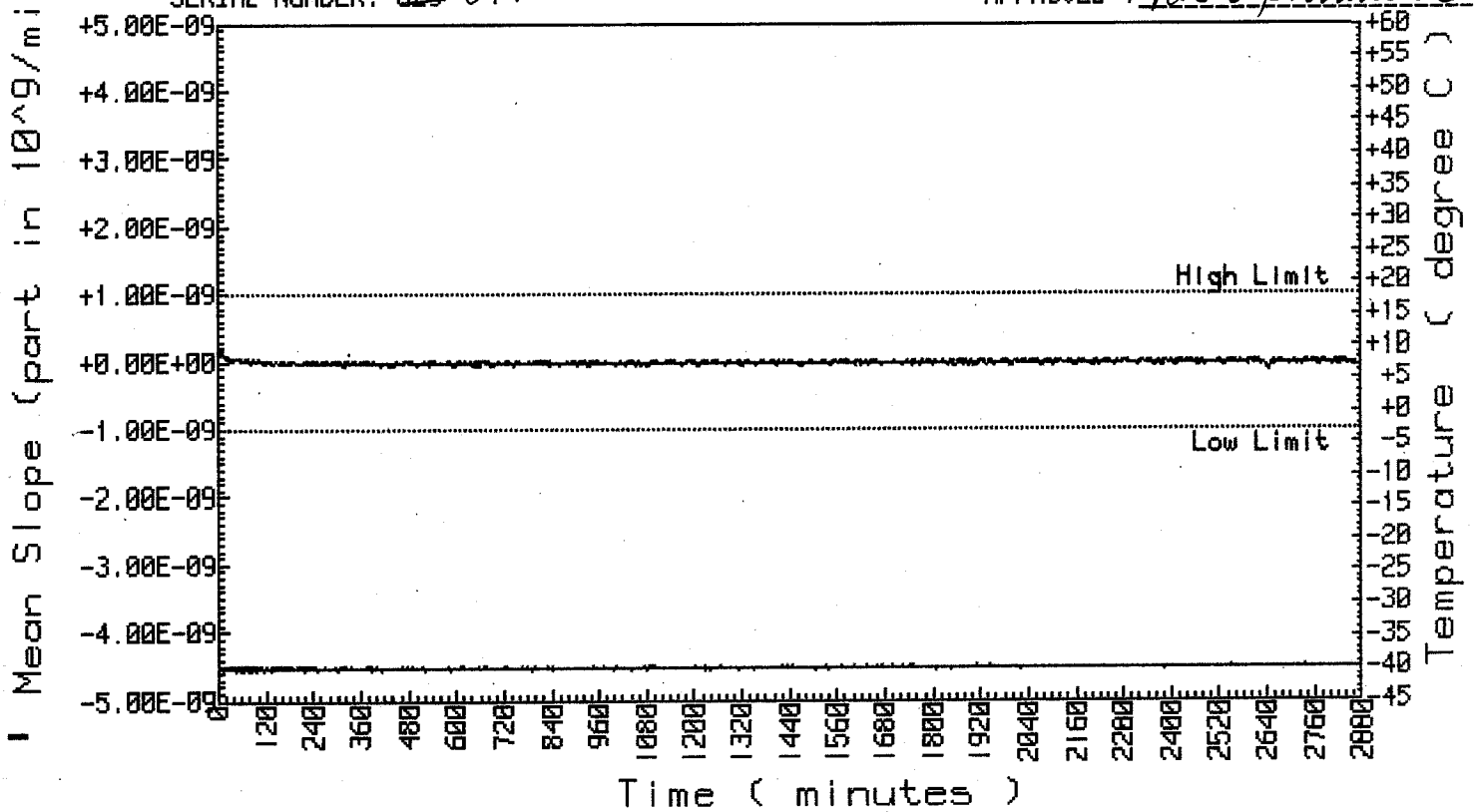
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: ~~029~~ 017

DATE: 14 Oct 2000

TESTED BY: [signature]

APPROVED : Rosa Barrineau



BEACON MEDIUM TERM STABILITY

SAFT BATTERY

MANUFACTURER: SEIMAC

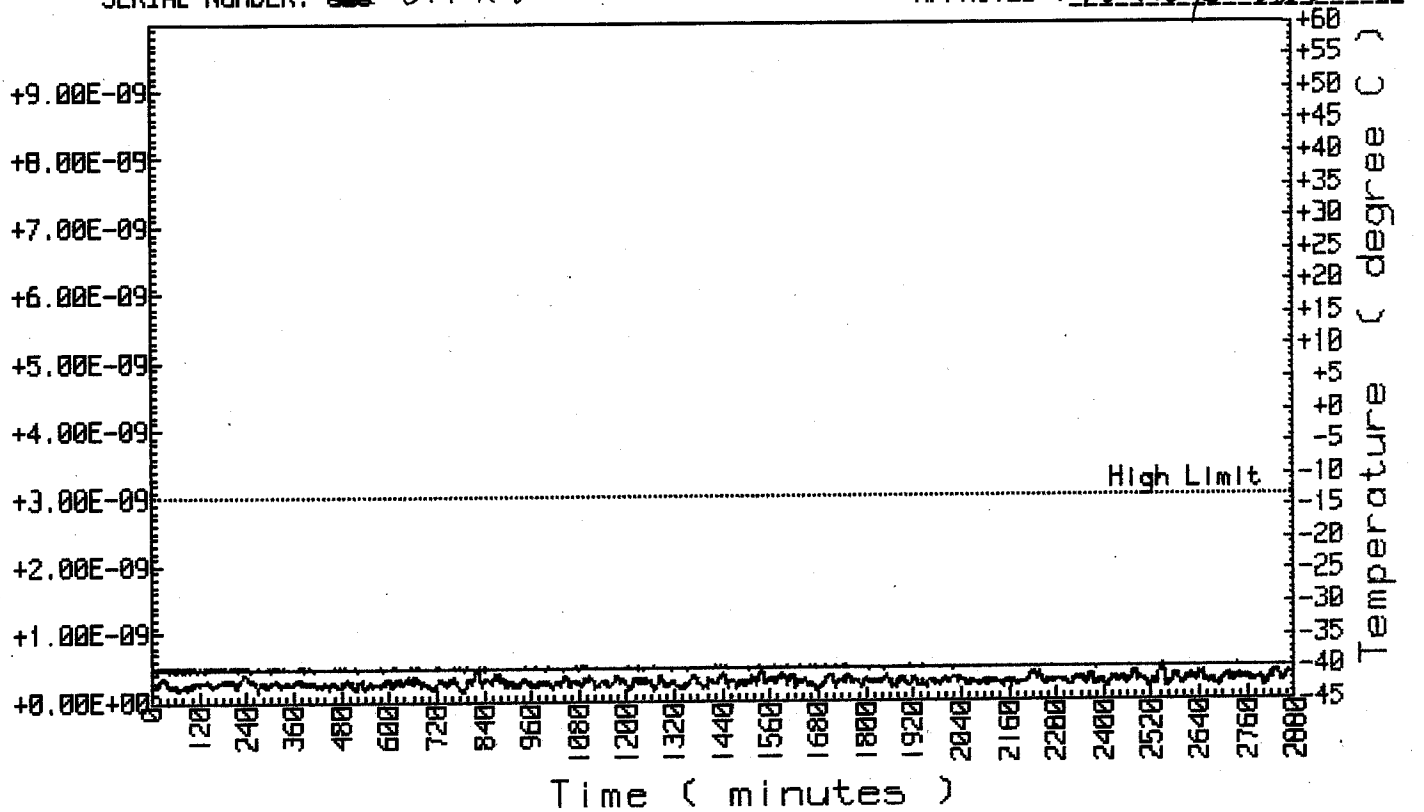
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: ~~829~~ 017 RR

DATE: 14 Oct 2000

TESTED BY: [signature]

APPROVED : Rosa Barrineau



406 SIGNAL OUTPUT POWER

SAFT BATTERY

MANUFACTURER: SEIMAC

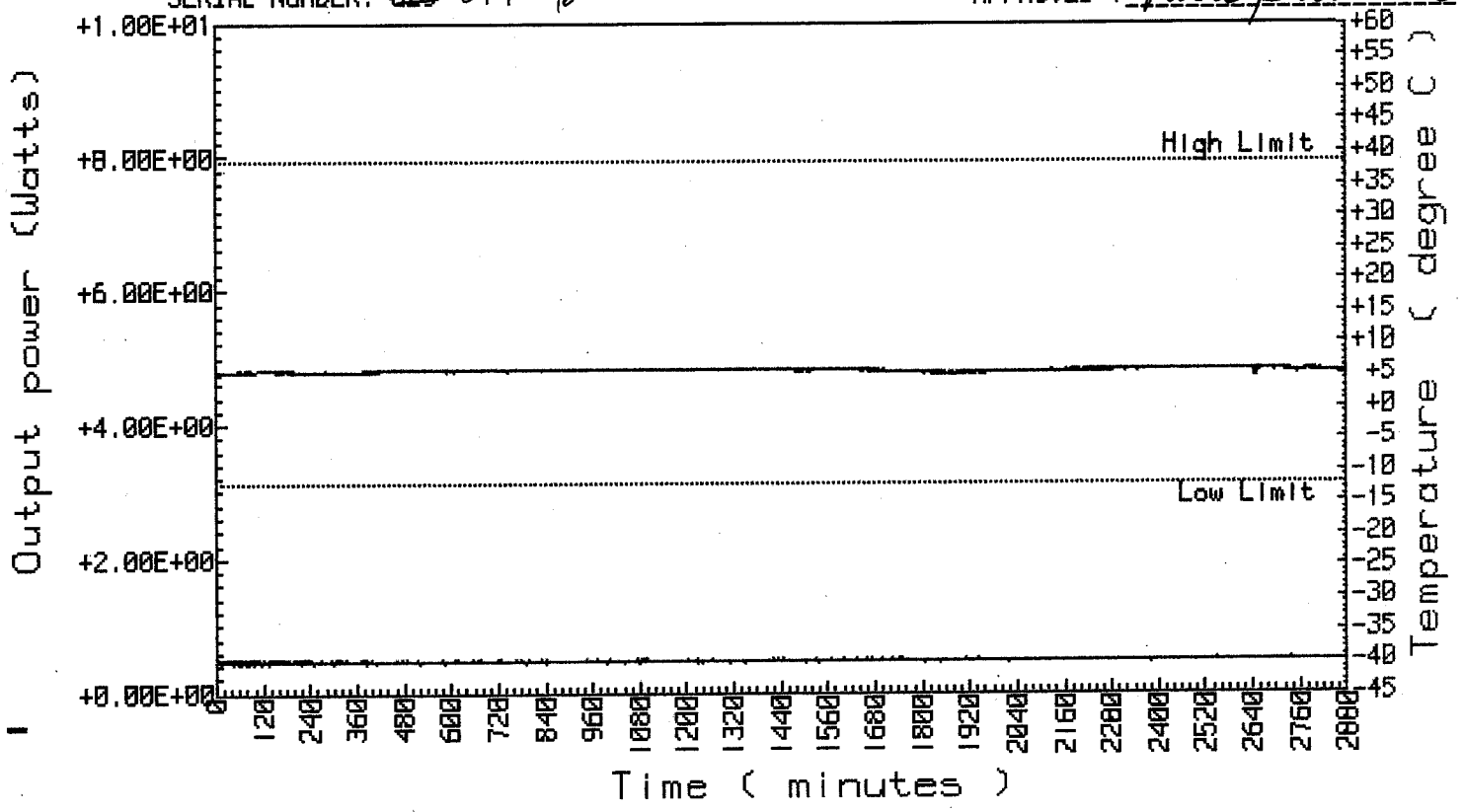
MODEL NUMBER: PROFIND 406

SERIAL NUMBER: ~~025~~ 017RB

DATE: 14 Oct 2000

TESTED BY: [signature]

APPROVED : Rosa Barrineau



ETERN BATTERY **Manual Data Collection / Observation Record**

Date: 10 - 11 OCT 04 Time: _____

Tested by: C Bel Approved by: Rosa Barrineau

Test Description: A13.1 OPERATIONAL LIFE TEST - BATTERY PRECONDITIONING FACTOR (F) ETERN BATTERY

Specification Reference: RCTM 82-2000/SC110-CD2 ~~A13.1~~ PARA A13.1

Test Results: the battery was subjected to a Constant Discharge over a 100Ω Load for a period of 11 Hours 39 min. ~~11:39. period of time~~. This Simulates a 5 year period of Self Testing and 5 years of Storage. 2000 HRS - 0739 HRS

POST TEST VOLTAGE 8.51V LOADED

AFTER 2 MIN 8.75V UNLOADED

Manual Data Collection / Observation Record

Date: 10/12/00 Time: 1500

Tested by: J.C. Hl Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon strobe rate, checked within 1st 24 hour period AND 121.5 Beacon Power: EASTERN BATTERY

Specification Reference: RTCM 32-2000/SC110-CD2 para. A13.1

Test Results: 21/minute

121.5 -15.2 dbm +30 = +14.8

Manual Data Collection / Observation Record

Date: 13 Oct 00 Time: 0743

Tested by: C Baker Approved by: Rosa Carrineau

Test Description: Operational Life - Beacon STROBE RATE - 121.5 Beacon PEAK Power ETERN BATTERY

Specification Reference: RCTM 32-2000/SC 110-CD2 Para A 13.1

Test Results: ~~22.8~~ 16.8 dbm 121.5 OFFSET 58dbm. 20/min Strobe.

Manual Data Collection / Observation Record

Date: 13 Oct 00 Time: 1914

Tested by: C Bahn Approved by: Rosa Barrineau

Test Description: Operational Life Beacon Strobe Rate and 121.5 Beacon Power
Eterna Battery

Specification Reference: RCTM 32-2000 / SC110-CD2
Para A13.1

Test Results: 20 / minute
121.5 -15.2dbm. +30 = +14.8

Manual Data Collection / Observation Record

Date: 13 Oct 00 Time: 22:30

Tested by: CTB Approved by: Rosa Barrineau

Test Description: Operational Life Beacon Strobe Rate and 121.5 Beacon Power

Eterna Battery

Specification Reference: RCTM 32-2000/SC110-CD2 Para A13.1

Test Results: STROBE 20/MIN

121.5 Beacon -15.3 +30 = 14.7

Manual Data Collection / Observation Record

Date: 10/12/00 Time: 2006

Tested by: C Boh Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Strobe rate, Checked within 30 hours - AND 121.5 beacon Power ETERN Battery

Specification Reference: RCTM 32-2000/SC110-CD2 Para A13.1

Test Results: ~~23.2~~ 17.2 dbm. 121.5 20/min. Strobe.

Manual Data Collection / Observation Record

Date: 13 OCT 00 Time: _____

Tested by: C Bah Approved by: Rosa Barrineau

Test Description: OPERATIONAL Life . Beacon Strobe rate and 121.5 BEACON Power

Specification Reference: RCTM 32-2000/SC110-CD2 PARA A13.1

Test Results: Strobe rate. 20/min.
121.5 Power ~~23.0~~ 17.0

Manual Data Collection / Observation Record

Date: 14 Oct 00 Time: 0645

Tested by: C. Bolin Approved by: Rosa Barrineau

Test Description: _____

Specification Reference: _____

Test Results: Beacon Strobe 20/min.

Power 121.5 -15.3 (redacted) +30 = +14.7 ~~21.3 + 30~~

operated approx 5 min and power dropped to -30.0

406 Beacon was down as well.

SAFT BATTERY

Manual Data Collection / Observation Record

Date: 12 - 13 OCT 00 Time: _____

Tested by: C Bah Approved by: Rosa Barrineau

Test Description: A13.1 Operational life Test
Battery Preconditioning FACTOR (F)
SAFT BATTERY

Specification Reference: RCTM 322000/SC110-CD2 ~~A13.1~~ PAR A13.1

Test Results: The battery was subjected to A Constant Discharge over a 100Ω LOAD for a period of 11 Hours 39 min this Simulates a 5 year period of Self testing and 5 years of Storage. 2026 HRS - 0805 HRS.

Post ~~Test~~ Condition Voltage 8.98 V UNLOADED
AFTER 2MIN 8.43 V LOADED
END of ~~Preconditioning~~ 8.57 V LOADED
AFTER 3MIN 8.71 V unloaded

Manual Data Collection / Observation Record

Date: 10/15/00 Time: 1155

Tested by: C Bahn Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Strobe rate Checked 121.5 Power output SAFT SN 11

Specification Reference: RCTM 32-2000/SC110-CD2 PARA A13.1

Test Results: 90/MIN 121 Power Out -15.6 +30 = 14.4

Manual Data Collection / Observation Record

Date: 10/15/00 Time: 1758

Tested by: C Bah Approved by: Rora Barrineau

Test Description: operational Life - Beacon Strobe Rate and 121.5 Power output.

SAFT Battery

Specification Reference: RCTM 32-2000 / SC110-CD2 Para A18.1

Test Results: Strobe 50/min.

121.5 -15.6 +30 = 14.4

Manual Data Collection / Observation Record

Date: 15 OCT 00 Time: 2216

Tested by: C Bohn Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Strobe Rate and 121.5 Power

SAFT Battery

Specification Reference: RCTM 32-2000 /SC110-CD2 Para. A 13.1

Test Results: Beacon Strobe Rate 20/min

121.5 Power -15.5 +30 = 14.5

Manual Data Collection / Observation Record

Date: 16 OCT Time: 0545

Tested by: C Bala Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Strobe rate and 121.5 Beacon Power

SAFT Battery

Specification Reference: RCTM 32-2000/SC110-CD2 Para 4.13.1

Test Results: Strobe rate /min

121.5 -15.5 dbm +30 = 14.5

Manual Data Collection / Observation Record

Date: 16 Oct 00 Time: 1003

Tested by: C Bah Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Strobe Rate, Checked SAFT Battery

Specification Reference: RCM 32-7000/SC110-CD2 Para A13.1

Test Results: 30/min.
121.5 -15.6 dbm. +30 = 14.4

Manual Data Collection / Observation Record

Date: 16 Oct 00 Time: 1145

Tested by: C Bahn Approved by: Rosa Barrineau

Test Description: Operational Life - Beacon Strobe Rate and 121.5 Rcvr/XMTR. Power.

SAFT Battery.

Specification Reference: RTCM 32-2000/SC110-CD2 Para A13.1

Test Results: 20/min Strobe Rate

121.5 -15.6 dbm +30 = +14.4

STROBE LIGHT

Manual Data Collection / Observation Record

Date: 10/16/00 Time: 1500

Tested by: [signature] Approved by: Rosa Barrineau

Test Description: Strobe test - ambient

Specification Reference: RTCM para. A13.2

Test Results: RATE: 21 /min

INTENSITY: 0.8375 candela

DURATION: 85 msec.

Manual Data Collection / Observation Record

Date: 10/16/00 Time: 1763

Tested by: C Bah Approved by: Rosa Barrineau

Test Description: Strobe test - Low temp

Specification Reference: RTCM Para A13.2

Test Results: Rate 20/min

Intensity: 0.85 candela

duration 108 μsec

Manual Data Collection / Observation Record

Date: 10/16/00 Time: _____

Tested by: C. Bak Approved by: Rosa Barrineau

Test Description: Hi Temp Strobe Test

Specification Reference: RTCM 32-2000 SC 110 -CD2
Para 17.2

Test Results: Rate 90/min
Intensity: .89 Candella.
Duration 148 msec.

ANNEX XI. SELF-TEST

AMBIENT TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION - AMBIENT TEMP
MEASUREMENT DATE: 2 Oct 2000 TIME: 20:08:54

TESTED BY: C Bal APPROVED BY: Rosa Barrineau

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be:	0	1	1	0	1	0	0	0	0
Decoded:	0	1	1	0	1	0	0	0	0

NUMBER OF BURST DURING SELF TEST CYCLE: 1

Duration 440.3 ms.
First Burst Delay 52 Sec

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION – AMBIENT TEMP
MEASUREMENT DATE: 2 Oct 2000 TIME: 20:10:25

TESTED BY: C Bal **APPROVED BY:** Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	1	1	0	1	0	0	0	0

*** ERROR IN FRAME SYNCHRONIZATION *** SELF TEST Verification

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1

*** BCH CODE OK ***

MAXIMUM TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION - HIGH TEMP
MEASUREMENT DATE: 3 Oct 2000 TIME: 14:36:23

TESTED BY: C Bob APPROVED BY: Rosa Barrineau

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	1	1	0	1	0	0	0	0
Decoded:	0	1	1	0	1	0	0	0	0

NUMBER OF BURST DURING SELF TEST CYCLE: 1

440.3 Mc pulse.
1ST Burst Delay 53 Sec
STrobe note 21.

SMC ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
ANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
EACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION - HIGH TEMP
EASUREMENT DATE: 3 Oct 2000 TIME: 14:38:17

ESTED BY: C. Bal APPROVED BY: Rosa Barrineau

EACON DIGITAL MESSAGE VERIFICATION

YNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

RAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	1	1	0	1	0	0	0	0

*** ERROR IN FRAME SYNCHRONIZATION *** SELF TEST Verification

ESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

IGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

EACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1

*** BCH CODE OK ***

MINIMUM TEMPERATURE

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION – Low Temp
MEASUREMENT DATE: 4 Oct 2000 TIME: 14:43:21

TESTED BY: C Bel APPROVED BY: Rosa Barrineau

FRAME SYNCHRONIZATION BIT #: 16 17 18 19 20 21 22 23 24

Should be:	0	1	1	0	1	0	0	0	0
Decoded:	0	1	1	0	1	0	0	0	0

NUMBER OF BURST DURING SELF TEST CYCLE: 1

440.3 mc
53 Sec Burst delay.
Flash rate 20 PMin.

WSMR ELECTRONIC PROVING GROUND, US ARMY, FORT HUACHUCA, ARIZONA
MANU: SEIMAC MODEL NO: PROFIND 406 SERIAL NO: 029
BEACON CERTIFICATION TEST RESULTS - SELF TEST VERIFICATION -Low Temp
MEASUREMENT DATE: 4 Oct 2000 TIME: 14:45:09

TESTED BY: _____ **APPROVED BY:** Rosa Barrineau

BEACON DIGITAL MESSAGE VERIFICATION

SYNCHRONIZATION BIT #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Should be:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decoded:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

*** BIT SYNCHRONIZATION OK ***

FRAME SYNCHRONIZATION BIT #:	16	17	18	19	20	21	22	23	24
Should be:	0	0	0	1	0	1	1	1	1
Decoded:	0	1	1	0	1	0	0	0	0

*** ERROR IN FRAME SYNCHRONIZATION *** Self test verification

MESSAGE TYPE: SHORT MESSAGE (bit 25 = 0)

DIGITAL MESSAGE IN HEXADECIMAL: A D C D 0 0 0 0 0 4 4 0 4 0 1 0 0 A A 9 A

BEACON BCH CODE VERIFICATION

BCH CODE BIT #:	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Should be:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1
Decoded:	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	0	1	1

*** BCH CODE OK ***

ANNEX XII. AUTOMATIC RELEASE MECHANISM AND AUTOMATIC ACTIVATION

P/N 57500

Manual Data Collection / Observation Record

Date: 13 Sept 00 Time: _____

Tested by: Pat Dugie Approved by: Rosa Barrineau

Test Description: Automatic release and activation using release mechanism p/n 57500

Specification Reference: RTCM 32-2000/SC110-CD2 para A14.0

Test Results:

normal (amb)	-	1.8 m
normal (cold)	-	2.1 m
normal (hot)	-	1.5 m
starboard	-	2.1 m
port	-	1.5 m
bow down	-	1.6 m
stern down	-	1.5 m
upside down	-	1.7 m

P/N: HAMMAR #20

Manual Data Collection / Observation Record

Date: 18 Sept 00 Time: _____

Tested by: Pat Dubie Approved by: Rosa Barrineau

Test Description: Automatic release and activation using release mechanism p/n Hammar #20

Specification Reference: RTCM 32-2000/SC110 -C02 para A14.0

Test Results:

normal (amb)	-	3.1 m
normal (cold)	-	3.94 m
normal (hot)	-	2.72 m
starboard	-	3.2 m
port	-	3.3 m
bow down	-	2.9 m
stern down	-	3.0 m
upside down	-	3.3 m